As envisioned by Mark Weiser as early as 1991, pervasive computing systems and services have truly become integral parts of our daily lives. Tremendous developments in a multitude of technologies ranging from personalized and embedded smart devices (e.g., smartphones, sensors, wearables, IoTs, etc.) to ubiquitous connectivity, via a variety of wireless mobile communications and cognitive networking infrastructures, to advanced computing techniques (including edge, fog and cloud) and user-friendly middleware services and platforms have significantly contributed to the unprecedented advances in pervasive and mobile computing. Cutting-edge applications and paradigms have evolved, such as cyber-physical systems and smart environments (e.g., smart city, smart energy, smart transportation, smart healthcare, etc.) that also involve human in the loop through social interactions and participatory and/or mobile crowd sensing, for example. The goal of pervasive computing systems is to improve human experience and quality of life, without explicit awareness of the underlying communications and computing technologies.

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